Rangeland Health Standards Assessment

Peter Creek Allotment #100

Allotment Overview Peter Creek Allotment #100

Allotment Boundaries and Pastures: See attached Map

7.5 Minute Topographic Maps: Peters Creek Sink, Mean Rock Well, Last Chance Lake, Frederick Butte

AUMs of Authorized Use: 329, The Allotment Management Plan allows for temporary use of 321 AUMs to test carrying capacity. The allotment has been tested for carrying capacity since 1985. There is enough data to determine carrying capacity.

Permitted Season: Spring, Summer, Fall 60 Cattle 4/15-9/14

Grazing System: Deferred Rest Rotation. System has been in place for 17 years.

The Peter Creek Allotment is located approximately 12 miles northeast of Christmas Valley, Oregon. Land status includes 13,800 acres of public land. The allotment is categorized as an M, maintain. Basis for the 1986 rating is as follows:

Range condition is satisfactory.

Forage production potential is moderate to high and present production is near potential.

No serious resource use conflicts or controversy exist.

Opportunities exist for positive economic returns.

Present management is satisfactory.

STANDARD 1 - Upland Watershed -Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

Indicators used to evaluate this standard are Soil Surface Factor (SSF), which documents erosion class and soil susceptibility to accelerated erosion; plant community composition, which indicates the root capacity of the soil profile, grazing management, and existing vegetation monitoring (forage utilization studies). Please refer to the attached maps and information from the Ecological Site Inventory (ESI) for North Lake County. This data is preliminary, may be edited or updated and is therefore used for estimation purposes only.

This standard is met on the Peter Creek Allotment. Overall the allotment is functioning properly as

indicated by the ground cover of perennial species, observations from the ESI including SSF, upland trend studies and existing forage utilization studies. The majority of acres (68%) in the allotment have and SSF rating of slight. 17% have an SSF rating of moderate and 15% are unknown. The unknown 15% represents vegetative communities too small to be mapped, transition zones and rock outcrops.

The grazing management is a three-pasture rest rotation system, which has been in place and followed since 1985. The grazing system is designed to maintain a healthy perennial vegetative community. The root systems of perennial vegetation assist in holding soil in place. Perennial vegetation provides protective cover to reduce soil movement, decrease compaction and thus increase infiltration. Species composition on the Peter Creek Allotment includes a variety of native deep rooted species well distributed throughout the allotment to provide protective cover. These species include Idaho fescue, Thurbers needlegrass and squirreltail. Shrub species include mountain big sagebrush, low sagebrush and bitterbrush. Ponderosa pine is also found on the allotment. Juniper species are present, but do not necessarily provide stability to the system, because of junipers ability to compete with desirable native species.

Forage utilization studies at a livestock level of 564 AUMs along with grazing season and grazing management are allowing for maintenance of a healthy vegetative community and meeting the standard.

STANDARD 2 - Riparian/Wetland-Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

The standard does not apply to this allotment because there are no perennial or intermittent streams or wetlands on the allotment.

STANDARD 3 -Ecological Processes-Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and hydrologic cycle.

Indicators used to evaluate this standard include vegetative composition, presence of weed species, ecological status, Observed Apparent Trend (OAT), current plant composition as compared to a defined Potential Natural Community (PNC) for the defined soil type and precipitation zone. The information derived from the North Lake ESI is preliminary at this time. Please see attached maps for ecological range sites defined with a Map Unit Number (MUN), SSF and OAT. Refer to Table 1 and attached maps for a summary of the seral stages present on the allotment. Acreage not listed is unknown and represents transition zones, vegetative communities to small to be mapped and rock outcrops. There are few weed species on the allotment and no known noxious weeds.

This standard is being met on the majority (75%) of the Peter Creek Allotment. Data indicates the standard would be met at livestock levels up to 564 AUMs under the current management. A review of range monitoring data indicates the majority of the allotment is in good condition with a stable to upward trend. OAT indicates 40% of the acreage in the allotment has an upward trend, shown on attached maps as MUN 11B, 565B, 616B and 639B, 35% of the acreage has a static trend, shown as

MUN 614B, 740B, 757B, 762B and B2280. 10% of the acreage in the allotment is in a downward trend. The downward trend is not attributable to livestock grazing. All of the acreage having a downward trend is in the South pasture on sandy soil dominated by rabbitbrush. This acreage was formerly dominated by big sagebrush them farmed. When farming was abandoned, rabbitbrush invaded the area. This acreage may not be capable of meeting the standard. Acreage in a downward trend is shown as 35% of MUN 661B, and 660B.

The dominant vegetative community on the allotment is juniper, mountain big sagebrush and Idaho fescue shown on the attached maps as MUN 616B, 11B and 614B. The allotment has a diversity of vegetation as shown on the ecological site map. Other vegetative communities include low sagebrush/Idaho fescue and mountain big sagebrush/Idaho fescue/needlegrass species. Much of the allotment is near potential as described in Table 1.

Table 1

Seral Stage	Percent Comparability to Potential Natural Community	% of Allotment
Early	0-25%	0
Mid	26-50%	25%
Late	51-75%	28%
PNC	76-100%	32%

STANDARD 4 - Water Quality Standards- Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

<u>This standard is not applicable</u> to the Peter Creek Allotment because the allotment does not have any perennial streams or areas that would fall under guidance of State water quality standards.

STANDARD 5 - Biological Diversity-Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

<u>This standard is met.</u> Overall the allotment exhibits a wide diversity of native plant communities, has adequate litter and standing dead material left at the end of each grazing season to provide proper nutrient cycling, hydrologic cycling and energy flow, and supports habitat for a variety of wildlife species.

There have been surveys for several specific Bureau sensitive plants in the allotment and no plants were found.

Special status wildlife species or their habitats that are present within this allotment include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*), and pygmy rabbit (*Brachylagus idahoensis*). There are also four species with high public interest. These are sage-grouse (*Centrocercus urophasianus*), mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*) and pronghorn antelope (*Antilocapra americana*).

No nesting habitat exists within this allotment for the bald eagle or peregrine falcon. It is suspected that they are occasional visitors to the area. No incidental sightings of peregrines exist within the vicinity of this allotment. There are no good foraging areas for peregrines within close proximity of this allotment. Bald eagle foraging may occur within the allotment, however it is probably restricted to occasional carrion scattered through the allotments. There are no resource conflicts for peregrine falcons or bald eagles.

Habitat is present for ferruginous hawk, burrowing owl and pygmy rabbits, but locations for these species are not known within the allotment. Inventories were conducted for burrowing owls throughout this allotment, but none were located. No specific inventories have been conducted to date for ferruginous hawks and pygmy rabbits within this allotment, however there are sightings within the surrounding area and they are suspected to occur within the allotment. There are no resource conflicts for these species.

The allotment is within mule deer winter range. Timing of grazing is such that fall season use is minimized and impacts to bitterbrush are light. Bitterbrush use appears to be minimal in most areas. No conflicts exist between mule deer and cattle grazing within this allotment.

Elk also use portions of this allotment during different times of the year. Elk herds within this area are very nomadic and use tends to be sporadic. Most of the use occurs in areas adjacent to private lands with alfalfa fields. No conflicts exist between elk and cattle within this allotment.

Pronghorn antelope habitat occurs throughout the allotment. Use for this species is probably scattered due to the amount of western juniper in the area. No major conflicts exist between pronghorn and cattle grazing within this area.

There are no known sage-grouse lek sites within or directly adjacent to the allotment. It is suspected that sage-grouse do use portions of the allotment. Sage-grouse habitats within the allotment contain approximately 8% (1,100 acres) suitable for nesting habitats. Suitable brood rearing habitats make up 30% (4,300 acres) and suitable winter habitats comprises 10% (1,500 acres). The other 52% (7,700 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to invasive western juniper that occurs throughout much of the allotment. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

Overall, this standard is being met for wildlife species within this allotment. Much of the allotment is covered with western juniper. This appears to be the primary limiting factor for sage grouse habitats.

Removal of younger stands of western juniper could benefit sage grouse in the long run, by providing additional habitat.

Current Management and Recent Management Changes

Acting Manager, Lakeview Resource Area

Current livestock management is a deferred rest rotation grazing system that has been in place since 1985 (17 years). Carrying capacity has been tested for the same 17 years. Data indicates the standards for rangeland health are being met with livestock use levels at 564 AUMs.

Team Members Theresa Romasko Todd Forbes Lucile Housley Erin McConnell Robert Hopper Ken Kestner	Title Rangeland Management Specialist Wildlife Biologist Botanist Natural Resource Specialist (NRS) Weeds Supervisory RMS Supervisory NRS	
<u>Determination</u>		
() Existing grazing management practices or levels of grazing use on the Peter Creek Allotment promote achievement of significant progress towards the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.		
() Existing grazing management practices or levels of grazing use on the Peter Creek Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.		

Date

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